

TREX, A NOVEL GENE OF TRAF-INTERACTING EXT GENE FAMILY AND  
DIAGNOSTIC AND THERAPEUTIC USES THEREOF

ABSTRACT OF THE DISCLOSURE

5 This invention provides an isolated nucleic acid molecule  
encoding a Tumor necrosis factor Receptor-Associated Factor  
(TRAF) protein-interacting hereditary multiple extoses  
(TREX) protein. This invention also provides vectors  
comprising the isolated nucleic acid molecule encoding a  
10 TREX protein. This invention further provides a purified  
TREX protein and antibodies thereto. This invention provides  
oligonucleotides comprising a nucleic acid molecule of at  
least 15 nucleotides capable of specifically hybridizing  
with a unique sequence included within the sequence of an  
isolated nucleic acid molecule encoding TREX protein. This  
15 invention provides an antisense oligonucleotide comprising  
a sequence capable of specifically hybridizing with a unique  
sequence included within a genomic DNA molecule encoding a  
Tumor necrosis factor Receptor-Associated Factor (TRAF)  
protein-interacting hereditary multiple extoses (TREX)  
20 protein. This invention provides a monoclonal antibody  
directed to an epitope of a TREX protein. This invention  
provides methods of inhibiting TREX protein interaction with  
a TRAF protein; of inhibiting overexpression of TREX  
protein; of inhibiting growth of a tumor; of treating  
25 abnormalities in a subject associated with overexpression of  
TREX. This invention provides pharmaceutical compositions  
comprising oligonucleotides effective to prevent  
overexpression of a TREX protein or antibodies effective to  
block binding of a TREX protein to a TRAF protein; screening  
30 for a compounds which inhibit TREX protein and TRAF protein  
binding; of detecting predispositions to cancers comprising  
TREX mutations; and of diagnosing cancer comprising TREX  
mutations.